

### What is physical activity?

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## Physical Activity

- Physical inactivity is responsible for about 7% of the total burden of disease in Australia and rates second only to tobacco smoking.<sup>1</sup>
- Physical inactivity has been linked to coronary heart disease, ischaemic stroke, type 2 diabetes, osteoporosis and some cancers.<sup>2</sup>
- 54% of Australian adults are not doing enough physical activity to achieve health benefits.<sup>3</sup>
- 30% of Australians reported that they participated in physical activity more than once a week.<sup>4</sup>
- 52% of Victorians participate in exercise, an organised sport or a recreational activity two or more times a week.<sup>5</sup>
- 52% of boys participated in a sport once a week or more, with 45% of girls participating in a sport once a week or more.<sup>6</sup>
- Increasing physical activity in older adults has been shown to decrease depression, increase overall health and improve quality of life.<sup>7</sup>
- People who participate in sports and physical activity during adolescence are much more likely to be physically active in later life.<sup>8</sup>

### What is physical activity?

The World Health Organisation defines physical activity as all movements in everyday life, including work, recreation, exercise and sporting activities.<sup>9</sup>

Research indicates that individuals who include a moderate amount of physical activity on most, if not all, days of the week can obtain significant health benefits.<sup>10</sup>

The Australian National Physical Activity Guidelines recommended that the daily requirement of physical activity is 30 minutes. However, three 10 minute sessions per day can be just as effective.<sup>11</sup>

The Australian Government has developed Physical Activity Recommendations for Children and Young People. These guidelines recommend that children and young people should participate in at least 60 minutes (and up to several hours) of moderate to vigorous-intensity physical activity every day.<sup>12</sup>

Moderate-intensity activity will cause a slight, but noticeable, increase in your breathing and heart rate, while vigorous implies activity that makes you 'huff and puff' (National Physical Activity Guidelines for Health 1999).

## Physical Activity Fact Sheet

### What do we know?

The 2000 National Physical Activity Survey showed that more than half (54%) of Australians aged 18–75 years did not undertake leisure-time physical activity at the levels recommended to achieve health benefits.

Fifteen per cent reported that they had not participated in any physical activity in the previous week and 39% reported some activity but insufficient to achieve any benefit. Those aged 30–59 were less active, with 18–29 year olds reporting the most activity.<sup>13</sup>

In Victoria, 61.4% of men participated in sufficient regular physical activity to achieve health benefits (that is, 150 minutes or more of at least moderate intensity activity over 5 or more days per week). Participation rates for women were slightly lower at 57.6%.<sup>14</sup>

Between 1997 and 2000 the proportion of Australians who said that they had participated in lower than recommended levels of physical activity rose from 49% to 54%. Indigenous Australians are more likely to report no physical activity in their leisure time. Forty-three percent of those living in non-remote areas reported no leisure-time physical activity compared with 30% of non-indigenous people living in the same area.<sup>15</sup>

Globally, 60% of people don't achieve the minimum recommendation of 30 minutes moderate-intensity physical activity daily.<sup>16</sup> Among adults, 17% are estimated to be inactive.<sup>17</sup>

Society has changed rapidly over the years, with labour saving devices, technology and passive forms of entertainment contributing to lifestyles that are increasingly sedentary. Increased car ownership has led to increased traffic and greater safety concerns have led to less walking and cycling to school and work.<sup>18</sup>

There is growing evidence to support the link between the built environment and our physical health. Urban growth has seen new suburbs built in a way that promotes car dependency, with heavy arterial roads and few facilities to encourage walking, cycling or playing.<sup>19</sup>

The ABS Children's Participation in Cultural and Leisure Activities Survey revealed that 97% of girls and boys aged 5–14 years old reported that the most popular leisure time activity outside of school hours was watching television and videos.<sup>20</sup>

To encourage more physical activity such as walking, neighbourhoods need to have safe footpaths, good traffic control, lights-controlled pedestrian crossings, visible street signs, good lighting, walkable street networks and major centres of activity that are full of mixed uses such as working, shopping and meeting, so that they become attractive places to be.<sup>21</sup>

## **Physical Activity Fact Sheet**

### **Burden of disease**

Being physically inactive contributes significantly to the global burden of chronic disease. Regular physical activity plays a major part in helping prevent chronic disease along with a healthy diet and not smoking.<sup>22</sup>

In fact, physical activity is ranked second only to tobacco control as the most important factor in disease prevention in Australia.<sup>23</sup>

The World Health Organisation's World Health Report 2002 estimated that 1.9 million deaths among people aged 15 years and over were attributable to physical inactivity, and that physical inactivity contributed to 10–16% of global cases of breast, colon and rectal cancers and diabetes mellitus, and about 22% of ischaemic heart disease.<sup>24</sup>

### **Benefits of physical activity**

Regular physical activity decreases the risk of cardiovascular disease, particularly coronary heart disease, with studies showing that you are twice as likely to have a heart attack if you don't take part in moderate to intense physical activity.

Physical activity lowers blood pressure and decreases the chance of developing Type 2 diabetes. It raises the levels of good cholesterol (HDL) and can be protective against some forms of cancer. Being physically active can also improve mental wellbeing by reducing feelings of stress, anxiety and depression.<sup>25</sup> Studies have shown that physical activity can reduce the duration and intensity of clinical depression.<sup>26</sup>

Weight bearing exercises such as walking, running and weight training strengthen the musculoskeletal system, which can decrease the likelihood of developing osteoporosis and, in the elderly especially, lessen the risk of having a fall.<sup>27</sup>

People who participate in sports or other types of physical activity at an early age, and especially during adolescence, are much more likely to be physically active adults.<sup>28</sup>

### **What can we do?**

There are four main areas in people's lives where there is the potential to increase the levels of physical activity: at work (especially if there is a component of manual labour); as a form of transport (for example walking or cycling to work or school); at home (domestic duties such as housework, gardening, maintenance) and during leisure time (participating in sports or active recreational activities).

## Physical Activity Fact Sheet

### References

1. Australian Institute of Health & Welfare, 'The burden of disease and injury in Australia', Cat. no.PHE 17, AIHW, Canberra.
2. Bauman A & Owen N 1999, 'Physical activity of adult Australians', *Journal of Science Medicine & Sport*, 2(1):30–41.
3. Australian Institute of Health & Welfare 2004, 'Australia's Health 2004', Cat. No. A., Canberra.
4. Standing Committee on Recreation and Sport 2003, Participation in Exercise Recreation and Sport Annual Report.
5. Ibid.
6. Australian Bureau of Statistics Year Book Australia 2003, Culture and Recreation, Children's Participation in Sports and Leisure Activities.
7. Vance D et al 2005, 'The effects of physical activity and sedentary behaviour on cognitive health in older adults', *Journal of Aging & Physical Activity*, 13, 294–313.
8. Tammelin T 2005, 'A review of longitudinal studies on youth predictors of adult physical activity', *International Journal of Adolescent Medical Health*, 17(1): 3–12.
9. World Health Organisation 2002, Physical Activity Fact Sheet, series 2 of 5.
10. US Department of Health and Human Services 1999, 'Physical Activity and Health: A Report of the Surgeon General', Centre for Disease Control, Nation Centre for Chronic Disease Prevention and Health Promotion.
11. Department of Health & Ageing 1999, National Physical Activity Guidelines, Canberra.
12. Department of Health & Ageing, Australia's Physical Activity Recommendations for Children and Young People.
13. Australian Institute of Health & Welfare 2004, 'Australia's Health 2004', Cat. No. A., Canberra.
14. Victorian Population Health Survey 2003, Physical activity, healthy eating and overweight/obesity patterns across Victoria.
15. Australian Institute of Health & Welfare 2004, 'Australia's Health 2004', Cat. No. A., Canberra.
16. World Health Organisation 2003, Global Strategy on Diet, Physical Activity and Health Draft – Physical Activity Fact Sheet.
17. Ibid.
18. Australian Institute of Health & Welfare 2004, 'Australia's Health 2004', Cat. No. A., Canberra.
19. VicHealth 2003, 'Planning for Health', *VicHealth Letter*, Issue No. 19 Summer 2003, VicHealth, Melbourne.
20. Australian Institute of Health & Welfare 2004, 'Australia's Health 2004', Cat. No. A., Canberra.
21. VicHealth 2003, 'Planning for Health', *VicHealth Letter*, Issue No. 19 Summer 2003, VicHealth, Melbourne.
22. WHO 2003 op. cit.
23. Mathers C & Stephenson 1999, 'Burden of Disease and Injury in Australia', AIHW Cat. No. PHE 17, Canberra.
24. World Health Organisation 2002, *The World Health Report 2002*.
25. Australian Institute of Health & Welfare 2004, 'Australia's Health 2004', Cat. No. A., Canberra.
26. Lotan M, Merrick J & Carmeli E 2005, 'A review of physical activity and wellbeing', *International Journal of Adolescent Medical Health*, 7(1):23–31.
27. Australian Institute of Health & Welfare 2004, 'Australia's Health 2004', Cat. No. A., Canberra.
28. Tammelin op. cit.